

ANNUAL REPORT

JANUARY 2018

San Francisco Bay Area
Rapid Transit District

Robert Raburn, President, Board of Directors

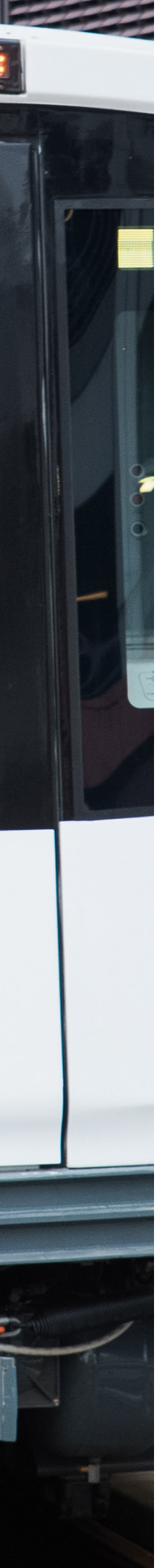
Grace Crunican, General Manager

BART

BUILDING A BETTER BART



JANUARY 2018





Robert Raburn
President, Board of Directors



Grace Crunican
General Manager

This Annual Report communicates progress towards our Strategic Plan goals and indicators, and reflects our values of transparency, accountability, and data-driven decision making.

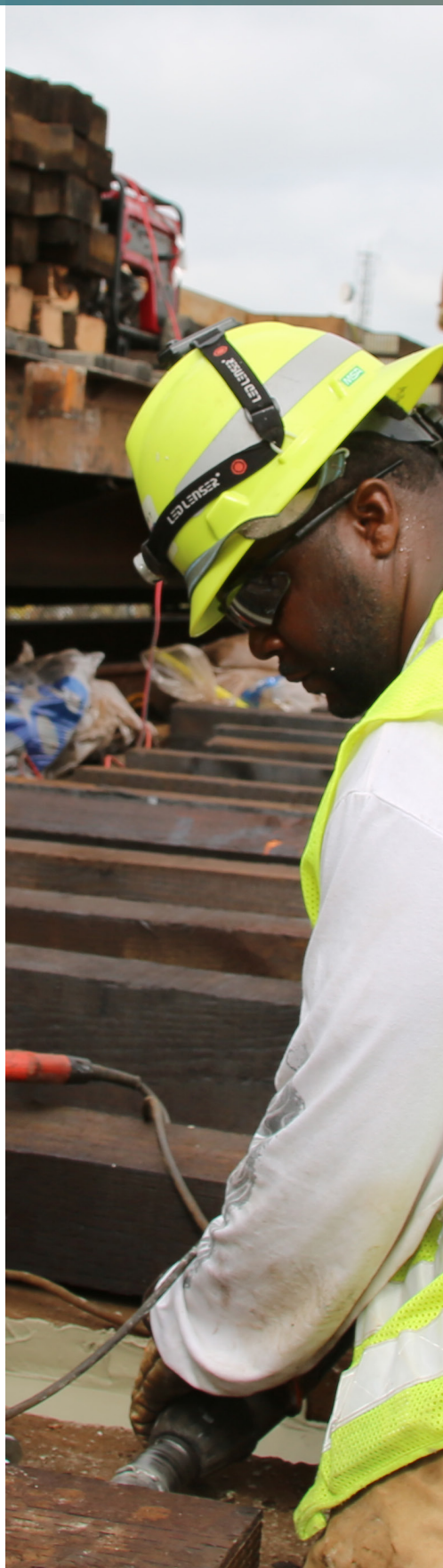
Last year, we began work on Measure RR projects, opened a beautiful station at Warm Springs, and undertook rigorous testing of the first Fleet of the Future train cars. Once production ramps up, we'll be bringing on up to 16 cars a month, which will help reduce crowding and system delays. We will also be opening two new extensions in Contra Costa and Santa Clara counties and beginning a major earthquake retrofit of the Transbay Tube.

We will also continue to make critical system repairs funded by Measure RR. Because of the generous support of Bay Area voters, we can look forward to a Better BART system in the years to come.

Measure RR Implementation

EXAMPLES OF IMPLEMENTATION PROJECTS PLANNED THROUGH FY19

- **San Francisco Escalators:** Begin replacement of platform and street escalators in downtown San Francisco, including new canopies for the street escalators to prevent damage from the elements ($16 million).
- **Trackway Replacement:** Replace 10 miles of worn trackway and related improvements to make the ride quieter, safer and more reliable ($93.2 million).
- **Earthquake Safety:** Begin retrofitting the Transbay Tube ($10.3 million), the preliminary engineering to strengthen the track between the Lake Merritt and Coliseum stations ($4 million), and the replacement of the cross-passage doors in the Tube, which are critical in the event of an emergency evacuation ($9.1 million).
- **Caldecott Tunnel Repair:** Begin realignment of the Caldecott BART Tunnel, which has moved over several decades because of Hayward Fault creep ($10.8 million).
- **Waterproofing:** Upgrade waterproofing in tunnels and structures –water seepage has been damaging vital systems and caused major delays ($4.5 million).
- **Hayward Maintenance Complex:** Begin Phase 2 expansion of the Hayward maintenance facility, which will house the Fleet of the Future train cars ($5.6 million).
- **Traction Power Substations:** Begin work on new traction power substations in downtown SF, Richmond, Pleasant Hill and Oakland, which are critical to powering our train cars ($13.4 million).
- **2nd Transbay Tube:** Begin study of a 2nd Transbay Tube.





MEASURE RR IS FUNDING REPLACEMENT OF 10 MILES OF WORN TRACKWAY BY FY2019, TO MAKE THE RIDE QUIETER, SAFER AND MORE RELIABLE

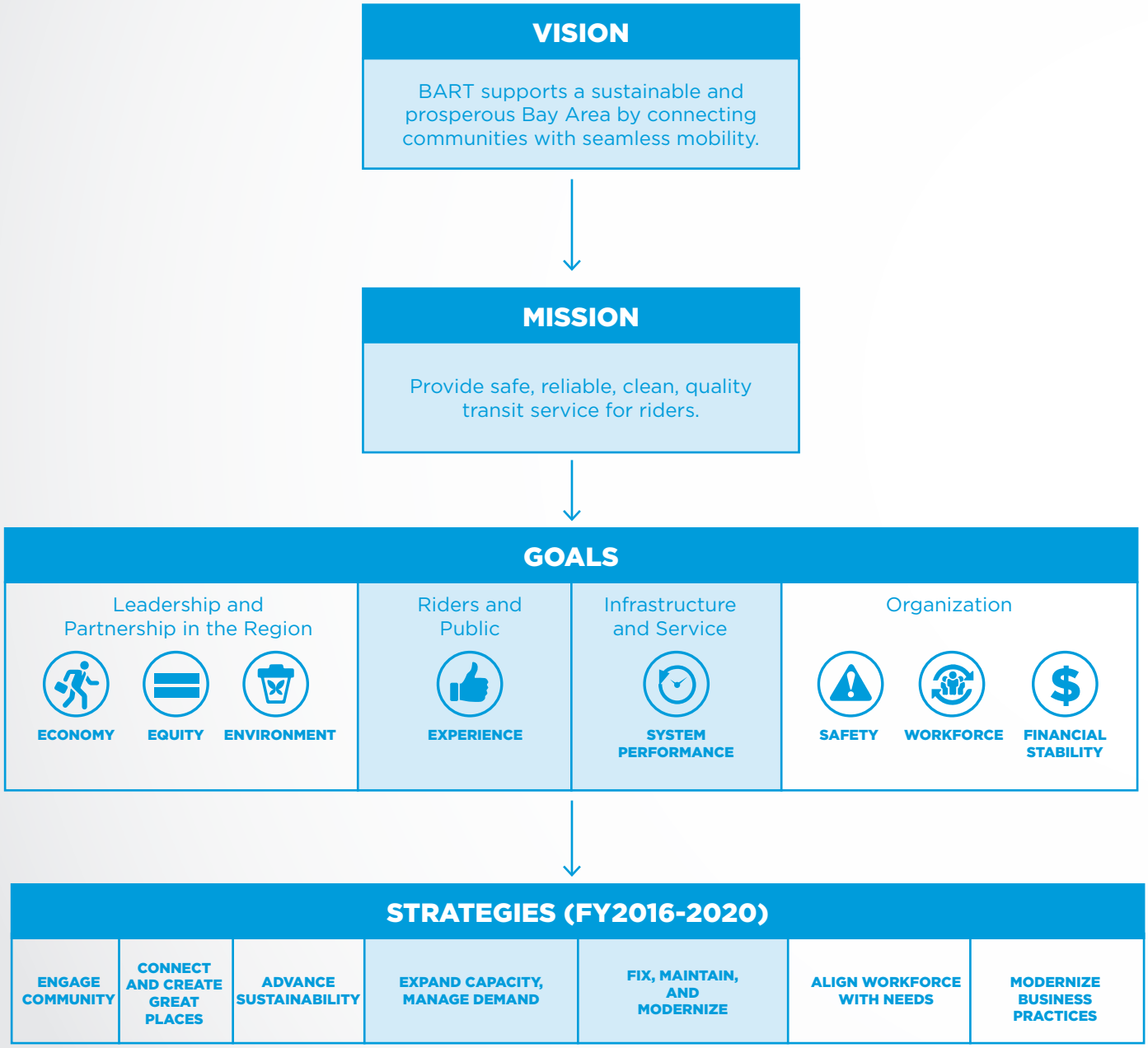
Thank you Measure RR voters!

Since voters approved the bond we've:

- Issued $300 million third-party certified climate-friendly green bonds
- Completed repairs to a major section of Downtown Oakland track
- Hired 55 key positions for bond work
- Completed 18 small business outreach events
- Established a Bond Oversight Committee

BART'S STRATEGIC PLAN

BART's Strategic Plan Framework lays out eight goals that guide the agency's work planning, budgeting, and performance measurement processes. This report communicates how we are progressing towards our goals by summarizing recent achievements and performance trends for key indicators associated with each goal area.



STRATEGIC INDICATORS AT A GLANCE

GOAL AREA	STRATEGIC INDICATOR	FISCAL YEAR 2017* PERFORMANCE	LONG TERM BENCHMARK	EVALUATION
SYSTEM PERFORMANCE	**On-time performance:** Percent of customers arriving on time	89%	92%	◐
	Escalator availability: Percent of street and platform escalators in service	88% street	95% street	○
		96% platform	96% platform	●
EXPERIENCE	**Customer satisfaction:** Percent of customers who are very or somewhat satisfied	69%	85%	○
SAFETY	**Crime:** Crimes against persons per million riders	2.7	2	○
WORKFORCE	**Turnover:** Percent of employees in critical positions departing within the year	6%	6%	●
FINANCIAL STABILITY	**Efficiency:** Change in the operating cost per passenger mile of service (FY16-F17) compared to typical inflation	7%	2.2%	○
ECONOMY	**Development near BART:** Change in concentration of housing units and jobs within ½ mile of BART to meet Plan Bay Area targets	Increasing **	Continue to increase	●
EQUITY	**Minority ridership:** Ratio of minority ridership to minority residents in the region	1.0	1.0	●
ENVIRONMENT	**Low-carbon energy:** Percent of BART's energy from low and zero carbon sources compared to board-adopted 2025 target	97%	90%	●
	Sustainable access: Percent of riders walking or biking to BART	Increasing ***	Continue to increase	●

● Benchmark met or exceeded

◐ Benchmark not met but within 5%

○ Benchmark not met by more than 5%

* Reflects performance for FY 17 overall, or for the most recent year that data was available.

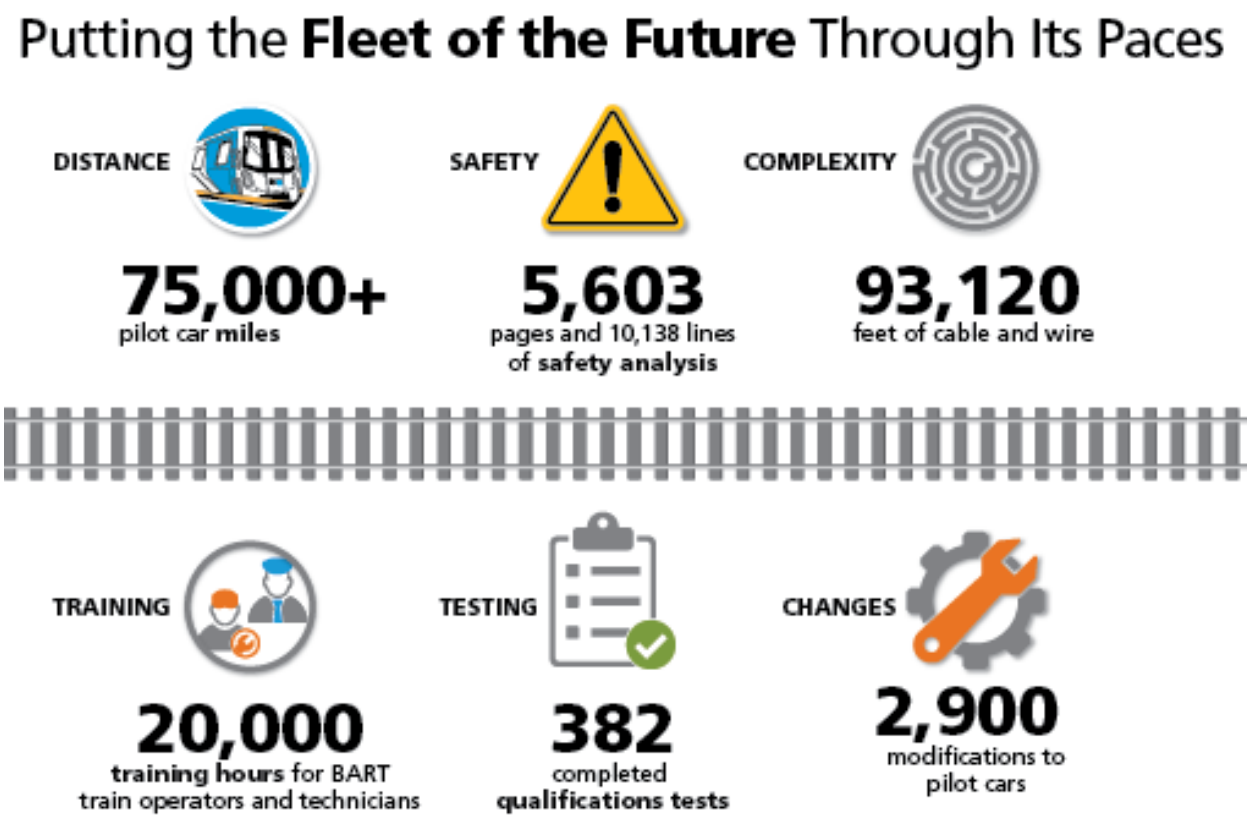
** The share of 4-County jobs within ½ mile of BART increased from 25% in 2010 to 26% in 2015; the share of 4-County housing units increased from 11% (2005-2009) to 12% (2010-2014). To meet Plan Bay Area targets, shares will need to reach 30% and 17% for jobs and housing units, respectively, by 2040.

*** The share of riders walking or bicycling to BART (active access) increased from 35% in 2008 to 44% in 2015 based on BART's Station Profile Survey. BART's Board of Directors set a target to reach 52% by 2025.

SYSTEM PERFORMANCE

LAST YEAR'S ACCOMPLISHMENTS

- **Fleet of the Future:** The first 18 cars arrived on site and rigorous testing began to ensure safe operations once they go into service. We also began actively training all train operators on the new cars and their modern systems.
- **Elevator/escalator renovations:** We began major overhauls of two escalators at the Montgomery and Embarcadero Stations and renovated the flooring materials of 90 elevators to improve safety, appearance, and cleanliness.
- **Major milestone in work to build a new train control system:** With the release of a request for vendor qualifications, we hit a major milestone in a multi-year effort to build the next-generation automatic train control system. Once complete, the system will reduce delays and allow more frequent service during peak periods.



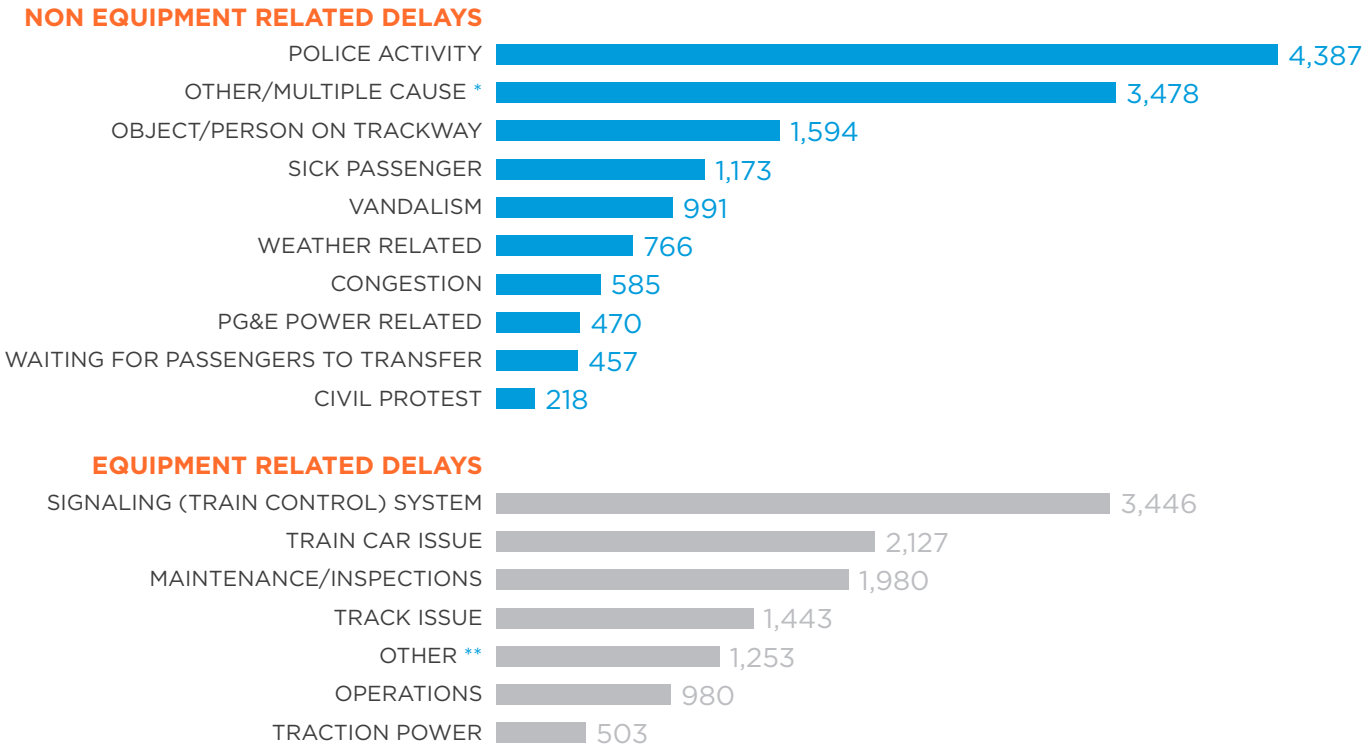
THE FIRST 18 NEW TRAIN CARS ARRIVED AND RIGOROUS TESTING BEGAN TO ENSURE **SAFE OPERATION** BEFORE OPENING FOR PASSENGER SERVICE



WHY IS MY TRAIN LATE?

BART staff routinely analyze sources of delay to so that we can pinpoint and address problems. Among delays in FY2017 with a known cause, more than half came from external factors like police actions, objects on the trackway, or weather, especially with the record amount of rain occurring in winter and spring 2017. The other half were related to BART equipment issues, especially problems with the outdated automatic train control system, train cars, and aging trackway.

BART FISCAL YEAR 2017 NUMBER OF DELAYED TRAINS BY SOURCE OF DELAY (AMONG DELAYS WITH KNOWN CAUSE)



* Other non-equipment related delays includes such causes as patron delays from unloading/loading, unruly patrons, earthquakes, or trains operating at slow speeds due to potential hazards.

** Other- equipment-related delays includes a range of miscellaneous causes such as delays and slow speeds caused by service disruptions, smoke coming from equipment, or situations where manual braking is required.

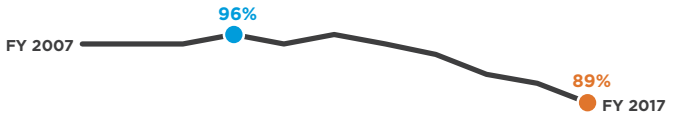
TO IMPROVE RELIABILITY AND ON-TIME PERFORMANCE WE ARE WORKING ON THE FOLLOWING:

- Replacing worn trackway using Measure RR funds. Worn trackway is a top source of delay.
- Bringing on new train cars, which will help us recover more quickly from delays. Today, BART does not have enough spare train cars available during peak periods to replace trains that go out of service.
- Aggressively maintaining existing train cars: Due to smarter maintenance practices, the average amount of time that passes between delays related to train car equipment has improved by 80 percent since Fiscal Year 2010.
- Increasing the amount of time that medical teams are stationed at West Oakland and Embarcadero stations to be able to respond quickly to medical emergencies during peak periods.
- Holding daily delay review meetings: BART Operations and BART Police meet daily to review and learn from data on the previous days' delays.

System Performance Strategic Indicators

Highest value Lowest value Most recent value

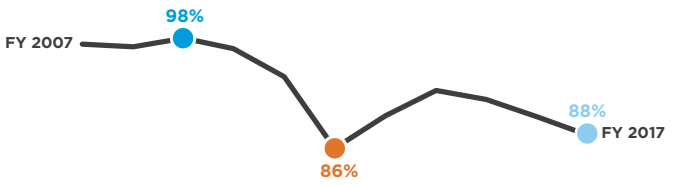
CUSTOMERS ON TIME



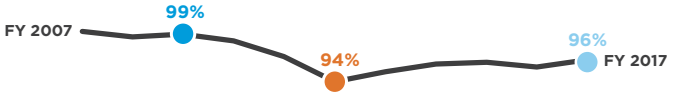
STATION ELEVATORS IN SERVICE



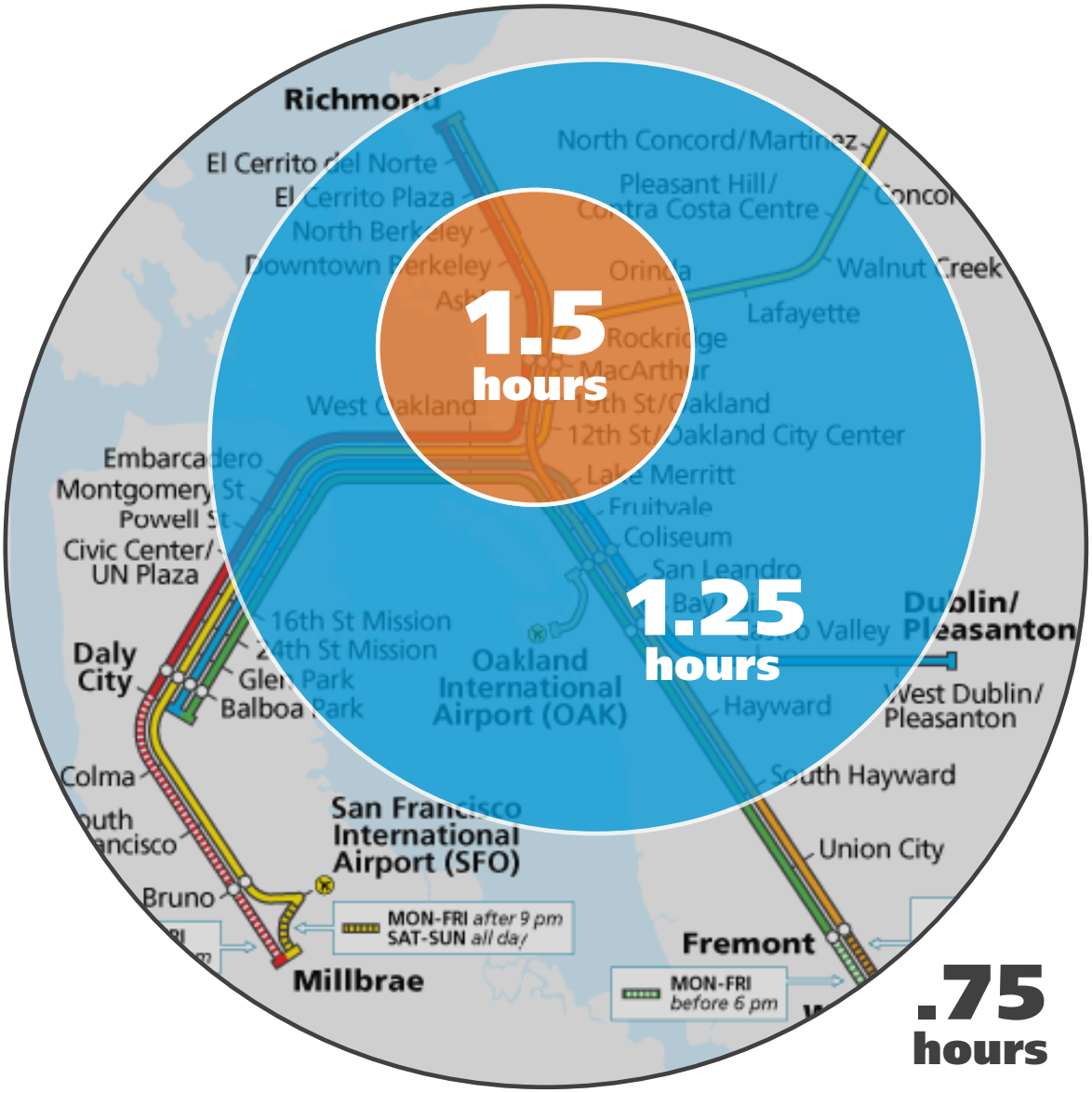
STREET ESCALATORS IN SERVICE



PLATFORM ESCALATORS IN SERVICE



Weekday Active Maintenance Time ("Wrench Time") by Zone



BART's Challenge

INSUFFICIENT TIME FOR TRACK MAINTENANCE

After moving crews and equipment to work sites, BART maintenance workers have as little as 45 minutes a night to maintain the trackway in the outlying parts of the system. Workers need more time to implement system renewal and reinvestment projects, including the trackway replacement planned under Measure RR and an upcoming earthquake retrofit of the Transbay Tube. Beginning in late 2018, we will be opening the system an hour later and continuing weekend closures to increase available maintenance time.

CUSTOMER EXPERIENCE

LAST YEAR'S ACCOMPLISHMENTS:

- **Removed seats to provide immediate crowding relief:** As of fall 2017, we had re-configured about a quarter of the fleet to provide about a 12% increase in passenger carrying capacity per car by removing seven seats per car. BART's Board voted to reconfigure the fleet after rider surveys showed 68% of riders preferred or were neutral regarding the new layout.
- **About 10 percent of the fleet converted to quieter wheel profile:** BART engineers have created a new wheel profile designed to reduce noise resulting from contact with the rail. Preliminary study shows the new profile is as much as 15 dB quieter than the existing profile. In FY17, about 10 percent of the fleet was converted to the new profile and we plan to convert 90 percent of the fleet by calendar year 2019. All Fleet of the Future cars will have this new, quieter profile.
- **Improved station condition:** We began construction on the El Cerrito del Norte modernization project, which includes new fare gates, elevators, stairwells, restrooms, public art and improvements to the Ohlone Greenway. At the Downtown Berkeley Station, we completed a new Clipper-only entrance area and are partnering to upgrade the plaza. We also made improvements at the Montgomery, Richmond, and Fruitvale Stations.
- **New services to address homelessness:** The rapid rise of homelessness in the region (Alameda County alone experienced a 40 percent increase between 2015 and 2017 according to the Point in Time Survey) is affecting BART and highlights a pressing need for action and understanding. To help address this issue, we partnered with San Francisco to bring a homeless outreach team into the downtown Market Street stations to help connect those who seek shelter and medical and psychiatric attention with local resources, and to bring three attended street-level public restrooms to the Civic Center, Powell, and 16th Street Mission stations. We are also hiring four new staff to help in station cleaning, and more personnel to enforce regulations against littering, fare evasion, and open drug use at Civic Center and Powell Street stations.

BART's Homeless Crisis Strategies



IN FY17 WE CONVERTED ABOUT 10 PERCENT OF THE FLEET TO A NEW, QUIETER WHEEL PROFILE. BY 2019, 90 PERCENT OF THE FLEET WILL BE CONVERTED.



PERFORMANCE TREND: CUSTOMER SATISFACTION

Our research indicates that overcrowding is a top source of customer dissatisfaction. To address this issue, we are creating more standing room by removing seats on the existing fleet and bringing on new train cars to allow us to run longer trains during peak periods. We are also working on long-term solutions to allow more frequent trains in the Transbay Tube during peak periods. This will require additional train cars beyond those already purchased, enhanced traction power and train control systems, and additional rail car storage space.

Experience Strategic Indicators

Highest value ● Lowest value ● Most recent value

% OF CUSTOMERS WHO ARE SATISFIED



AVG. CUSTOMER RATING FOR STATION CLEANLINESS (1-7)



AVG. CUSTOMER RATING FOR TRAIN INTERIOR CLEANLINESS (1-7)



AVERAGE NUMBER OF TRAIN CARS IN THE A.M. TRANSBAY TUBE, 6-10 A.M.



SAFETY

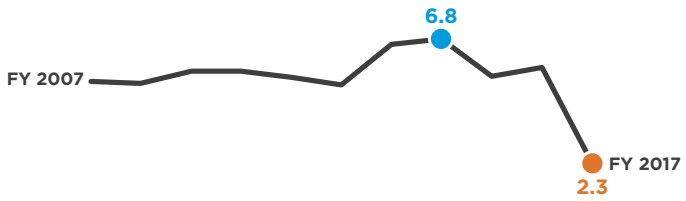
LAST YEAR'S ACCOMPLISHMENTS:

- **Crackdown on cellphone thefts:** We increased enforcement against cellphone thefts and launched a public awareness campaign to help riders avoid having their phones stolen. Cellphone thefts have been trending down since initiation of the campaign.
- **Completed installation of working security cameras on all trains:** The cameras bolster BART's existing robust security infrastructure network, including platform and station cameras. The original in-train cameras included a mix of real and decoy cameras installed in the late 1990s and early 2000s as a deterrent to vandalism; all train cameras are now operational.
- **Suicide prevention campaign saves lives:** We launched a suicide prevention campaign in 2015 that included platform signage directing troubled passengers to call a hotline, and better training for BART personnel. The hotline has received between 20 and 50 BART-related calls per year, and suicide related collisions dropped from 14 in 2014 to 6 in 2016, suggesting the program may be saving lives.

Safety Strategic Indicators

Highest value Lowest value Most recent value

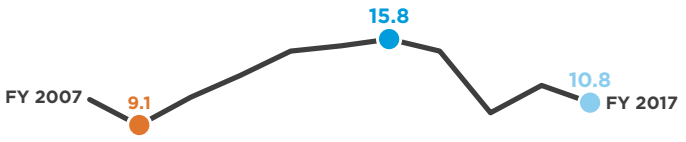
SAFETY INCIDENTS PER MILLION PATRONS



CRIMES AGAINST PERSONS ON THE BART SYSTEM PER MILLION RIDERS



EMPLOYEE INJURIES



BART'S NEW POLICE CHIEF TACKLES CRIME

BART's new police chief, Carlos Rojas, brings 27 years of experience to the agency. In 2017, Rojas immediately got to work implementing new strategies to address a recent spike in crime that mirrored trends in the Bay Area and nationally. Recently released FBI data showed that violent crime rates rose 4 percent in 2016 in the nation overall, and increased by double-digit percentages in many Bay Area cities. BPD is mounting an aggressive campaign to recruit more officers, and is implementing new techniques including high visibility foot patrols, and dedicated commanders for specific zones of the system.





WORKFORCE

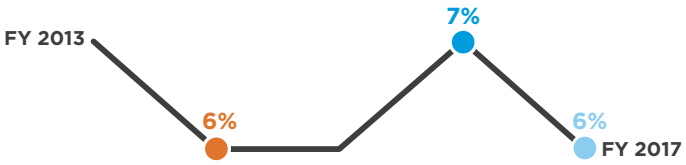
FISCAL YEAR 2017 ACCOMPLISHMENTS:

- **Robust police recruitment campaign:** To help increase police presence on the system, we initiated a robust recruitment campaign for new police, including offering a $10,000 hiring bonus for academy graduates or experienced officers. As a result of the campaign, the BART Police Department filled a record 25 positions in 2017, and is gearing up to hire even more next year.
- **Developing new workers for hard-to-fill positions:** Responding to a shortage of qualified workers in technical fields, we initiated the Transit Career Ladders training program, which involves introducing transit careers and helping college students to become more competitive for careers at BART. As of fall 2017, we had hired three full time electronic technicians – one of the most difficult types of jobs to fill - from the program.
- **Ramped up hiring to support Measure RR and new extensions:** As of fall 2017 we had hired 86 new staff to support implementation of Measure RR and opening of two new extensions (eBART and SVBX) in 2018. We will need to keep up with aggressive hiring to ensure we have the staff in place to deliver these critical programs.

Workforce Strategic Indicators

Highest value Lowest value Most recent value

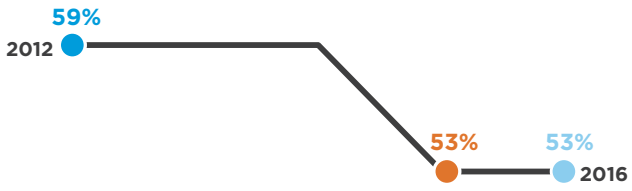
TURNOVER RATE OF EMPLOYEES HIRED TO CRITICAL POSITIONS



% JOB CLASSIFICATIONS IN WHICH MINORITES ARE UNDER-REPRESENTED



% JOB CLASSIFICATIONS IN WHICH WOMEN ARE UNDER-REPRESENTED



FOLLOWING A ROBUST CAMPAIGN, THE BART POLICE DEPARTMENT FILLED A RECORD 25 POSITIONS IN 2017, AND IS GEARING UP TO HIRE EVEN MORE NEXT YEAR.



FINANCIAL STABILITY

LAST YEAR'S ACCOMPLISHMENTS:

- **Balanced operating budget:** Last year, BART's Board of Directors made hard choices to balance the agency's operating budget, including implementing a hiring freeze for non-critical positions. BART also helped advocate for the successful passage of SB 1, which provided new revenues to help close the operating gap. BART anticipates facing similar challenges over the next few years.
- **Fare evasion control:** BART's Board of Directors acted to address fare evasion by adopting ordinances that will require riders to produce proof of payment upon request beginning in 2018. BART is also making improvements to video analytics to more closely monitor the problem and physical improvements to stations to reduce opportunities for evasion. Improvements have already been made at Downtown Berkeley, Fremont, Pittsburg-Bay Point, Embarcadero and South Hayward stations.
- **New advertising and climate revenue strategies:** We began implementing new advertising strategies, such as train wraps and digital advertising screens at selected stations. These are expected to boost advertising revenue by $1.2 million in FY18. We expect to raise another $4 million in FY18 by selling carbon credits through California's Low Carbon Fuel Standard program. Under the program, companies like BART that reduce climate change impacts can sell carbon offsets to companies that produce greenhouse gases.
- **Expanded the BARTable program to increase evening and weekend ridership:** BART launched a new and improved BARTable website, which promotes taking BART to go shopping, visit museums and restaurants, and enjoy Bay Area entertainment, in cooperation with over 100 community partners. BARTable grew to over 60,000 email subscribers and social media followers this year, with content from over 100 community partners.

WE EXPANDED THE BARTABLE PROGRAM TO 60,000 SUBSCRIBERS TO PROMOTE TAKING BART FOR SHOPPING AND FUN ON THE EVENINGS AND WEEKENDS.



PERFORMANCE TREND: OPERATING EFFICIENCY

BART measures the efficiency of its operations by calculating the average operating cost per passenger mile traveled on the system. Adjusted for inflation, this metric has fallen significantly over the last decade due primarily to increasing system ridership. However, in the last year the trend has reversed and the costs per passenger mile have risen faster than inflation, due in part to falling weekend and evening ridership. Efficiency may be challenged by the opening of new system extensions, which will increase the agency's operating costs without a commensurate increase in revenues during the first few years of operation.

BART's Infrastructure at a Glance

BART's capital assets – tracks, tunnels, equipment, and facilities - are estimated to be worth at least $40 billion. Measure RR funds will go a long way towards keeping the system up to date, but the sheer size of the system means that capital re-investment will be an ongoing need. According to the BART FY17 Short Range Transit Plan, an approximately $5 billion capital shortfall still remains over the next 15 years, most of which is related to the need to re-invest in and replace original system components. BART uses asset management best practices to ensure available resources are focused on the highest priority re-investment needs.

Financial Stability Strategic Indicators

● Highest value ● Lowest value ● Most recent value

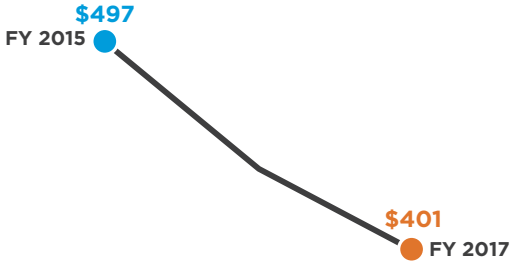
OPERATING COST PER PASSENGER MILE



% OPERATING COST COVERED BY FARES

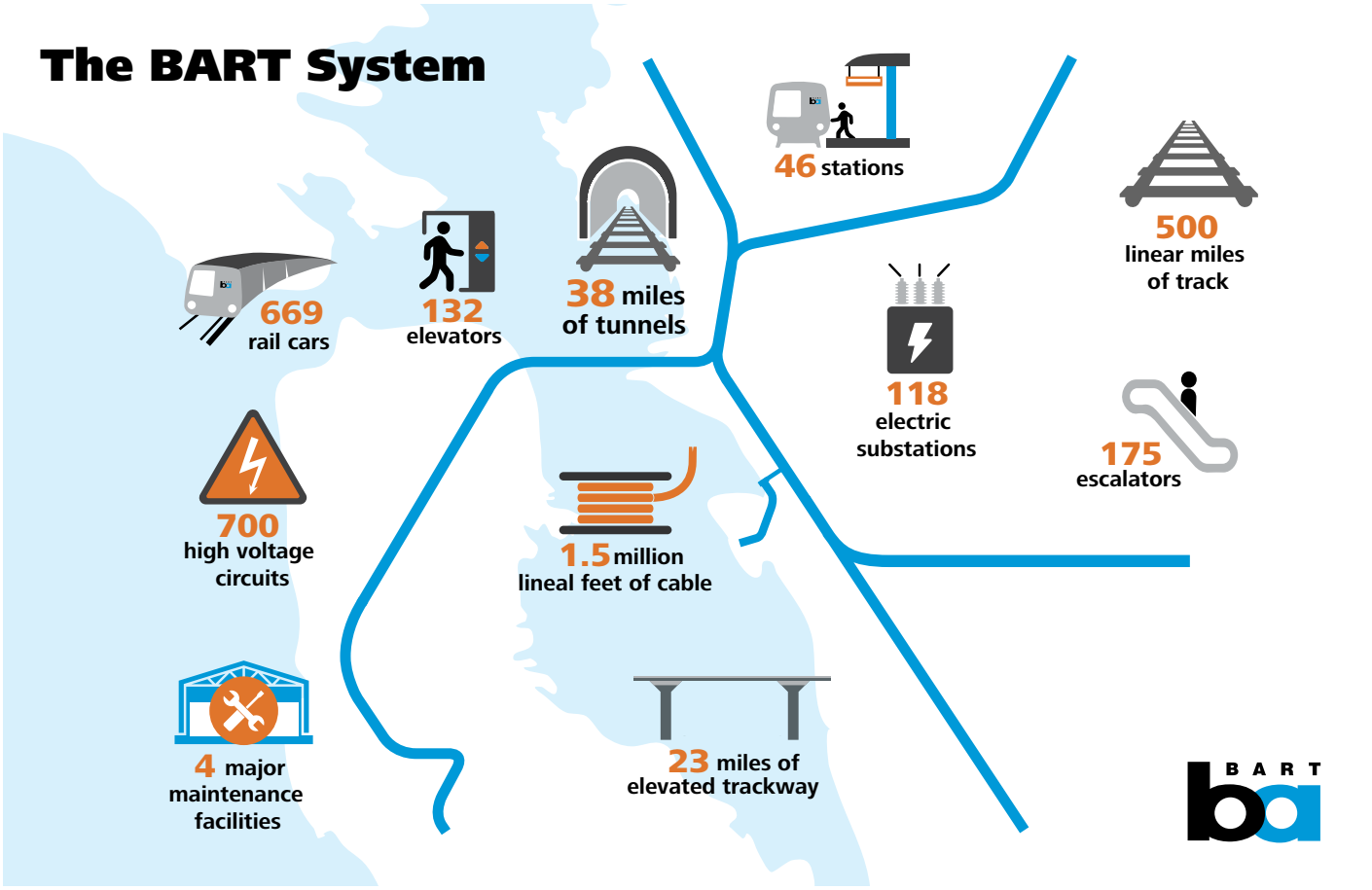


$ MILLIONS IN UNFUNDED PENSION LIABILITY



$ MILLIONS UNFUNDED RETIREE MEDICAL LIABILITY




The BART System
46 stations
500 linear miles of track
669 rail cars
132 elevators
38 miles of tunnels
118 electric substations
175 escalators
700 high voltage circuits
1.5 million lineal feet of cable
4 major maintenance facilities
23 miles of elevated trackway
BART



ECONOMY

LAST YEAR'S ACCOMPLISHMENTS:

- **Warm Springs station opened:** We opened the new Warm Springs/ South Fremont Station in spring of 2017, concluding the project $100 million under budget. The Station is the linchpin of Fremont's plans to expand its Innovation District, a hub for green and other cutting-edge technology jobs.
- **Completed three development projects and broke ground on three others:** Working with private developers, we completed two housing developments at South Hayward Station (151 affordable units and 206 market rate units), and San Leandro Station (115 affordable units). We also broke ground on projects at the MacArthur and West Dublin/ Pleasanton Stations, including the Workday world headquarters construction in Pleasanton, and on an additional project at San Leandro Station.

Economy Strategic Indicators

Highest value Lowest value Most recent value

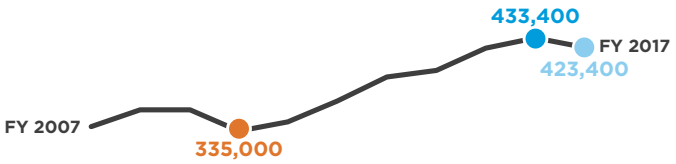
PERCENT OF 4-COUNTY* JOBS WITHIN 1/2 MILE OF BART



PERCENT OF 4-COUNTY* HOUSING UNITS WITHIN 1/2 MILE OF BART



AVERAGE WEEKDAY RIDERSHIP



AVERAGE WEEKEND DAY RIDERSHIP



*Includes San Francisco, Alameda, Contra Costa, and San Mateo counties.

WE OPENED THE WARM SPRINGS STATION IN 2017, $100 MILLION UNDER BUDGET. TWO NEW EXTENSIONS INTO CONTRA COSTA AND SANTA CLARA COUNTIES ARE COMING IN 2018.



Photo: Noah Berger

EQUITY

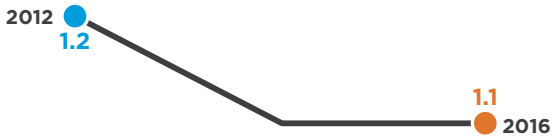
LAST YEAR'S ACCOMPLISHMENTS:

- **Pilot program to assist those with hearing loss:** We implemented a new technology at Fremont Station that allows riders who use hearing aids to toggle a switch to get a much clearer sound of announcements or when interacting with the Station Agent. Riders with hearing loss often have difficulty understanding announcements amid the noise on station platforms.
- **Safe Transit Policy:** Through the passage of the Safe Transit Policy in June 2017, BART's Board of Directors re-affirmed the agency's commitment to ensuring the BART system is an inviting, equitable, and safe community.
- **Expanded youth discounts:** BART's Board of Directors voted to expand the agency's youth discount program to provide a 50 percent discount to children aged 5-18 starting in January, 2018. Previously, a discount was available only through age 12.

Equity Strategic Indicators

Highest value Lowest value Most recent value

RATIO OF LOW INCOME RIDERSHIP COMPARED TO LOW INCOME RESIDENTS IN THE REGION



RATIO OF MINORITY RIDERSHIP TO MINORITY RESIDENTS IN THE REGION



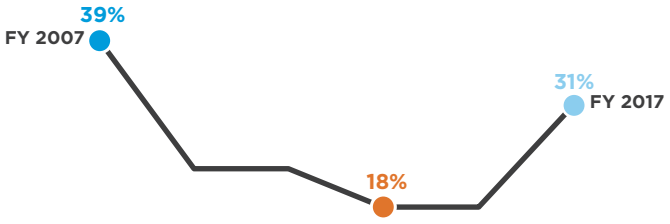
COMPLIANCE WITH GOALS FOR DISADVANTAGED BUSINESS SHARE OF FEDERAL CONTRACTS

In compliance

CUSTOMER RATING FOR DISABLED ACCESS (1-7 SCALE)



% OF HOUSING UNITS ON BART PROPERTY THAT ARE AFFORDABLE



THE BAY AREA RIDES TOGETHER CAMPAIGN CELEBRATED THE DIVERSITY OF BART'S RIDERSHIP - EVERYONE IS WELCOME ON BART.

the **B**AY
AREA
RIDES
TOGETHER

On this train, **everyone is welcome**



ENVIRONMENT

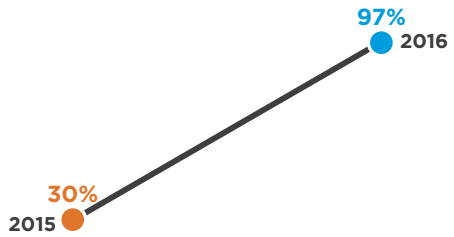
LAST YEAR'S ACCOMPLISHMENTS:

- **Electric vehicle charging stations at Warm Springs Station:** We unveiled one of the largest electric vehicle charging sites in the region at the new Warm Springs Station, including 22 charging stations that can accommodate up to 42 electric vehicles.
- **Carpool to BART demonstration program helps reduce parking crunch:** We helped launch a new pilot program to encourage carpooling to stations. As of 2017, the program had been rolled out at seven stations and more than 80 carpools were being matched per day. Users report riding BART more as a result of the program and most would otherwise have driven to the station.
- **BART Board approves renewable energy power purchases:** The BART Board of Directors approved two 20-year renewable energy power purchase agreements which will ensure the District gets a majority of its electricity from clean, renewable and competitively-priced sources. The share of BART's electricity supply that comes from renewable sources will rise from 4 percent today to 90 percent by 2021.
- **Bikeshare comes to BART:** We partnered with Ford to bring hundreds of Ford GoBikes to selected BART stations. Next year, bikes will be available at nearly all San Francisco, Oakland and Berkeley stations.

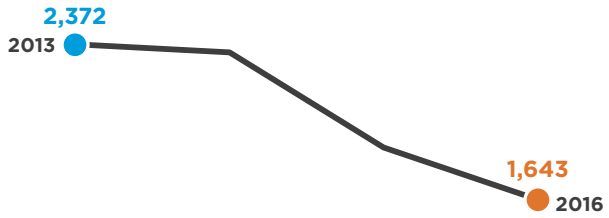
Environment Strategic Indicators

Highest value Lowest value Most recent value

% ENERGY FROM LOW AND ZERO CARBON SOURCES



GHG GENERATED BY BART (MT CO2E)/MILLION REVENUE VEHICLE MILES



% RIDERS ACCESSING BART BY WALKING AND BICYCLING



WE PARTNERED WITH FORD TO BRING HUNDREDS OF FORD GOBIKES TO SELECTED BART STATIONS. NEXT YEAR, BIKES WILL BE AVAILABLE AT NEARLY ALL SAN FRANCISCO, OAKLAND AND BERKELEY STATIONS.





BART WAS PROUD TO CARRY OVER HALF A MILLION RIDERS ON THE DAY OF THE 2017 WARRIORS VICTORY PARADE – THE FIFTH HIGHEST IN BART HISTORY.


RICHMOND
EL CERRITO
CORTE MADERA
MILL VALLEY
TIBURON
ALBANY
BELVEDERE
BERKELEY
SAUSALITO
EMERYVILLE
ALAMEDA
SAN
FRANCISCO
DALY CITY
BRISBANE
COLMA
SOUTH SAN FRANCISCO
SAN BRUNO